

SEP 05 2007

Application No. 10/519,352

REMARKS

Claims 1-22 are pending and subject to restriction. Claim 13 is amended for a typographical error.

Election of Group I

With traverse, the following elections are made: Group I, which has claims 1, 2, 4, 6, 7, 10, 11, and 12.

On pages 4 to 6 of the Office Action, the Examiner also issued an election requirement. The Examiner notes that if the Applicant elects Group I, he must elect a combination of glycoconjugates, lipooligosaccharides, specific bacterium and the specific antigen it cross-reacts. Accordingly, Applicant elects:

- (i) Glycoconjugate: lipooligosaccharides from *Moraxella catarrhalis*, purified.
- (ii) Bacterium: *Neisseria lactamica*
- (iii) Specific antigen: lipooligosaccharides

It is understood that all of what is elected and claimed in Group I will be examined as per 35 U.S.C. §121 and MPEP §809.02(a): "Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 C.F.R. §1.141". Further, claim 1 is generic to all of the claims in Group I and is a linking claim such that it is to be examined in its entirety pursuant to MPEP §809: "The linking claims must be examined with, and thus are considered part of, the invention elected. When all claims directed to the elected invention are allowable, should any linking claim be allowable, the restriction requirement between the linked inventions must be withdrawn."

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The Office Action advises Applicant, at page 4, that "Applicant is advised that examination will be restricted only to the elected sequence and/or disease and should not be construed as a species election". This statement is understood as a confirmation that the above-made species elections (i) - (iii) are species as per MPEP §809.02(a) since all of Group I is directed to "diseases due to infection by *Neisseria meningitidis*" and no restriction was made between such diseases and also because all of the claims are free of limitations to a particular sequence and no restriction was made to any particular sequence.

Moreover, claim 1 is a linking claim for claims 5-12 and 20-22, such that rejoinder of non-elected claims 5, 9, and 20-22 is requested upon such time as claim 1 is allowed.

Elections are made for procedural purposes and no admissions are made with respect to patentability or claims construction.

Traversal of Restriction Requirement

Respectfully, the restriction requirement is based on an incorrect assumption and can not stand as presented in the Office Action.

Specifically, the restriction requirement is based on the assumption that the subject of claim 1 would not be novel in view of Gu et al. (U.S. Pat. No. 6,685,949). The Examiner notes on page 4, lines 3 to 6 of the Office Action, that Gu et al. disclose a medicament including lipooligosaccharides (LOS) derived from *Moraxella catarrhalis* (column 4, lines 22 to 27). However, the medicament of claim 1 of the present application is distinct from the teaching of Gu et al. and thus novel, because claim 1 comprises the feature that the glycoconjugates or lipooligosaccharides (LOS) are from commensal *Moraxella catarrhalis* with cross-reactive antigens to *Neisseria meningitidis*.

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The study of Gu et al. has nothing to do with diseases caused by *Neisseria meningitidis*. Therefore, Gu et al. did not attempt to develop vaccines that have cross-reactivity to *Neisseria meningitidis* antigens. The cross-reactivity is, for instance, dependent on the bacterial strain used and on the chemical or other treatment of the vaccine. Gu et al. do not use the entire lipooligosaccharide, as it is preferred according to the present invention, but instead truncated lipooligosaccharides which were subjected to de-esterification or removal of lipid A. In example 8, column 24, lines 35 to 37 of Gu et al., it is disclosed that the vaccine used shows bactericidal activity in sera of vaccinated children. Such bactericidal activity is not observed according to the present invention, and it is not desirable because it prevents the development of natural immunity of the children. The bactericidal activity can especially be avoided when according to claim 2 of the present invention the oligosaccharides of LOS are cross-reactive with human blood group antigens. This is also not disclosed in Gu et al.

Therefore, the subject of the application as defined by the pending claims 1 to 22 is novel and relates to one single invention. Specifically, the lipooligosaccharides can be used in a medicament of claim 1 for active vaccination, whereas the antibodies against such lipooligosaccharides, which are also included in claim 1, are useful for passive vaccination after an infection or suspicion of an infection by *N. meningitidis*.

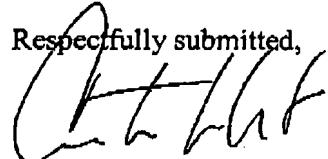
The restriction requirement is also traversed for another reason. The medicament of claim 3 is linked to the medicament of claim 1 by the common technical feature that also the lipooligosaccharides or glycoconjugates comprise antigens cross-reactive to *N. meningitidis*.

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Claims 1 and 3 share this feature such that there is a unity of invention pursuant to MPEP 1893.03(d) *Unity of Invention* and 37 C.F.R. §1.499 *Unity of invention during the national stage*.

For these reasons, the Patent Office is requested to withdraw the restriction requirement.

Respectfully submitted,



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